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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,729	07/20/2004	Bo Widen	0091-0239PUS1	6842

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EXAMINER

GALL, LLOYD A

ART UNIT	PAPER NUMBER
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3676

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/500,729

Applicant(s)

WIDEN, BO

Examiner

Lloyd A. Gall

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 7,8,15,16 and 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,9-14 and 17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7/20/04 and 1/19/06 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Applicant's election with traverse of the embodiment of figs. 1-5 in the reply filed on June 19, 2006 is acknowledged. The traversal is on the ground(s) that the claims were maintained in a single application in the International Search Report. This is not found persuasive because the examined claims are generic to the six species, and applicant may have the withdrawn claims also allowed in the event that a generic independent claim is allowed in the future.

The requirement is still deemed proper and is therefore made FINAL.

Claims 7, 8, 15, 16 and 18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on June 19, 2006.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 13, 14 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Olson (734).

It is first noted that claims 13, 14 and 17 are regarded as positively claiming only a key and a key blank. The specifics of the key lock are regarded as being only inferentially claimed. Further, the key and blank of Olson from which the key was made are capable of use with the specifics of the lock that are inferentially claimed in claims 13, 14 and 17.

Olson teaches a key and a key blank from which the key is made cooperating with a lock cylinder including a shell 6, a key plug 8 having locking tumbler assemblies 18, 19 located within the same cavity 16 of rows of cavities 16, a key slot 15 receiving a key 24 having grooves 25 located on its sides, the tumblers having body segments with mutually engaging flat surface portions sliding upon one another and contact finger portions 23 engaged by the coded surface portions of slots 25 of the key. The tumblers are located on each side of the key slot. The longitudinal groove 25 in fig. 7 of the key defines neighboring code surface portions for displacing the tumblers to different elevational positions.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5, 6 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Olson (734) in view of Droske (915) and Gysin (852).

Olson teaches a key and a key blank from which the key is made cooperating with a lock cylinder including a shell 6, a key plug 8 having locking tumbler assemblies 18, 19 located within the same cavity 16 of rows of cavities 16, a key slot 15 receiving a key 24 having grooves 25 located on its sides, the tumblers having body segments with mutually engaging flat surface portions sliding upon one another and contact finger portions 23 engaged by the coded surface portions of slots 25 of the key. The tumblers are located on each side of the key slot. The longitudinal groove 25 in fig. 7 of the key

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defines neighboring code surface portions for displacing the tumblers to different elevational positions. Droske teaches a pair of tumblers (11, 12... etc.) located in the same cavity as seen in fig. 1, wherein each tumbler includes a separate spring 22 as seen in fig. 2, wherein the springs contact only one tumbler, and the pairs of tumblers are elevationally movable independently of each other in the cavity. Gysin teaches contact portions 22 as seen in fig. 1, wherein the contact portions 22 are inwardly spaced from the end faces of the tumblers, whereby all contact portions 22 are axially separated in the longitudinal direction of the key plug. It would have been obvious to modify the tumbler pairs of Olson to include a separate spring for each tumbler, wherein the springs contact only one tumbler, and the tumblers are elevationally movable independently of each other in the same cavity, in view of the teaching of Droske, the motivation being to optimize the range of movement of each tumbler and the number of tumbler combinations usable with the key. It would have been obvious to modify the contact portions 23 of Olson such that they are axially separated from one another in the longitudinal direction of the key plug, in view of the teaching of Gysin, the motivation being to optimize the number of different positions that adjacent tumblers of a pair may be displaced and the number of key codes that may be incorporated.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Olson (734) in view of Droske and Gysin as applied to claim 3 above, and further in view of Vonlanthen (986).

In fig. 3, Vonlanthen teaches tumbler body segments having a part-cylindrical shape 10 to be guided by wall portions of the cavities in which they slide. It would have been

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obvious to modify the tumbler segments of Olson to include part-cylindrical surface portions, in view of the teaching of Vonlanthen, the motivation being to strengthen the tumbler segments with additional mass.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Olson (734) in view of Droske and Gysin as applied to claim 1 above, and further in view of Widen (816).

In fig. 10, Widen teaches a tumbler 105 cooperating with a side bar 108. It would have been obvious to utilize a side bar(s) with the lock of Olson, in view of the teaching of Widen, the motivation being to optimize the picking resistance of the lock cylinder.

Applicant's arguments filed January 19, 2006 have been fully considered but they are not persuasive. In response to applicant's remarks on page 13, the last paragraph, it is the examiner's position that even though the Olson reference was modified by Droske as set forth above such that adjacent tumblers of a pair are independently movable, the tumbler segments of Olson are not regarded as being connected to each other by the spring 21. The fact that the spring 21 of Olson abuts adjacent tumbler segments is not regarded as a connection for the tumbler segments. The remainder of applicant's remarks are regarded as moot in view of the new above grounds of rejection. The Declaration filed under 37 CFR 1.132 has been reviewed by the examiner, but found to be unpersuasive in overcoming the above grounds of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

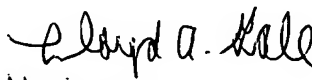
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lloyd A. Gall whose telephone number is 571-272-7056. The examiner can normally be reached on Monday-Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on 571-272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LG LG
September 02, 2006


Lloyd A. Galli
Primary Examiner